

WHAT IS CLAIMED IS:

1. A method comprising:

directing first energy to only a first interconnect element, the first interconnect element contacting a first conductive contact of a first device and a second conductive
5 contact of a second device, the first interconnect element to form a first electrical connection between the first conductive contact and the second conductive contact based at least in part on the first energy; and

directing second energy to only a second interconnect element, the second interconnect element contacting a third conductive contact of the first device and a fourth
10 conductive contact of the second device, the second interconnect element to form a second electrical connection between the third conductive contact and the fourth conductive contact based at least in part on the second energy.

2. A method according to Claim 1, wherein directing the first energy comprises
15 directing a laser at the first interconnect element, and

wherein directing the second energy comprises directing the laser at the second interconnect element.

3. A method according to Claim 1, wherein the first interconnect element comprises
20 a Controlled Collapse Chip Connect interconnect element.

4. A method according to Claim 1, wherein the first interconnect element comprises a solder ball.

5. A method according to Claim 1, wherein at least one of the first conductive contact, the second conductive contact, the third conductive contact, and the fourth conductive contact comprise solder paste.

5 6. A method according to Claim 1, wherein the first conductive contact and the third conductive contact are disposed on an integrated circuit die, and
 wherein the second conductive contact and the fourth conductive contact are disposed on an integrated circuit package.

10 7. A method according to Claim 1, wherein the first conductive contact and the third conductive contact are disposed on an integrated circuit package, and
 wherein the second conductive contact and the fourth conductive contact are disposed on a package interposer.

15 8. A method according to Claim 1, further comprising:
 joining the first device and the second device to create a combined device,
 wherein a plurality of interconnect elements are disposed between the first device and the second device, and
 wherein each of the plurality of interconnect elements is visible from one or more
20 locations external to the combined device.

 9. An apparatus comprising:
 a first device comprising a first plurality of conductive contacts;
 a second device comprising a second plurality of conductive contacts; and

a plurality of interconnect elements in contact with respective ones of the first plurality of conductive contacts and respective ones of the second plurality of conductive contacts,

5 wherein a first electrical connection is formed between a first one of the first plurality of conductive contacts and a first one of the second plurality of conductive contacts based at least in part on first energy directed to only a first one of the plurality of interconnect elements, the first one of the plurality of interconnect elements contacting the first one of the first plurality of conductive contacts and the first one of the second plurality of conductive contacts, and

10 wherein a second electrical connection is formed between a second one of the first plurality of conductive contacts and a second one of the second plurality of conductive contacts based at least in part on second energy directed to only a second one of the plurality of interconnect elements, the second one of the plurality of interconnect elements contacting the second one of the first plurality of conductive contacts and the second one of the second plurality of conductive contacts.

10. An apparatus according to Claim 9, wherein the first device comprises an integrated circuit die, and

20 wherein the second device comprises an integrated circuit package.

11. An apparatus according to Claim 9, further comprising a laser to direct the first energy to the first interconnect element, and to direct the second energy to the second interconnect element.

25 12. An apparatus according to Claim 9, wherein the first one of the plurality of interconnect elements comprises a Controlled Collapse Chip Connect interconnect element.

13. An apparatus according to Claim 9, wherein the first one of the plurality of interconnect elements comprises a solder ball.

14. An apparatus according to Claim 9, wherein at least one of the first plurality of
5 conductive contacts and the second plurality of conductive contacts comprises solder paste.

15. An apparatus according to Claim 9, wherein the first device comprises an integrated circuit package, and

wherein the second device comprises a package interposer.

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16. A system comprising:

an integrated circuit die comprising a first plurality of conductive contacts;

an integrated circuit package comprising a second plurality of conductive contacts;

a plurality of interconnect elements in contact with respective ones of the first
15 plurality of conductive contacts and respective ones of the second plurality of conductive contacts; and

a double data rate memory electrically coupled to the integrated circuit die,

wherein a first electrical connection is formed between a first one of the first
plurality of conductive contacts and a first one of the second plurality of conductive contacts
20 based at least in part on first energy directed to only a first one of the plurality of
interconnect elements, the first one of the plurality of interconnect elements contacting the
first one of the first plurality of conductive contacts and the first one of the second plurality
of conductive contacts, and

wherein a second electrical connection is formed between a second one of the first
25 plurality of conductive contacts and a second one of the second plurality of conductive
contacts based at least in part on second energy directed to only a second one of the plurality

of interconnect elements, the second one of the plurality of interconnect elements contacting the second one of the first plurality of conductive contacts and the second one of the second plurality of conductive contacts.

- 5 17. A system according to Claim 16, wherein at least one of the first plurality of conductive contacts and the second plurality of conductive contacts comprises solder paste.

18. A system according to Claim 16, further comprising:
a motherboard electrically coupled to the integrated circuit die and to the memory.